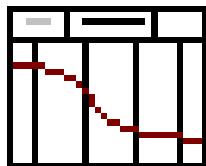


## Evaluation and visualisation of time-settlement tests

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# GGU-TIMESET

VERSION 4



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Last revision:

September 2008

Copyright:

GGU Zentrale Verwaltung mbH, Braunschweig

Technical implementation and sales:

Civilserve GmbH, Steinfeld

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## 1 Preface

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The **GGU-TIMESET** program allows evaluation and visualisation of time-settlement tests.

The program is designed to allow simple data input. The system is permanently displayed on the screen. Every alteration to the data is shown on the screen, so that optimum control of input data is guaranteed. Graphics output supports the true-type fonts supplied with WINDOWS, so that excellent layout is guaranteed. Colour output and any graphics (e.g. files in formats BMP, JPG, PSP, TIF, etc.) are supported. DXF files can also be imported by means of the integrated Mini-CAD module (see the "**Mini-CAD**" manual).

The program has been thoroughly tested on numerous examples from the literature and in engineering practice. No faults have been found. Nevertheless, liability for completeness and correctness of the program and the manual, and for any damage resulting from incompleteness or incorrectness, cannot be accepted.

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## 2 Licence protection and installation

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In order to guarantee a high degree of quality, a hardware-based copy protection system is used for the **GGU-TIMESET** program.

The GGU software protected by the **CodeMeter** copy protection system is only available in conjunction with the **CodeMeter stick** copy protection component (hardware for connection to the PC, "**CM stick**"). Because of the way the system is configured, the protected software can only be operated with the corresponding CM stick. This creates a fixed link between the software licence and the CM stick copy protection hardware; the licence as such is thus represented by the CM stick. The correct Runtime Kit for the CodeMeter stick must be installed on your PC.

Upon start-up and during running, the **GGU-TIMESET** program checks that a CM stick is connected. If it has been removed, the program can no longer be executed.

For installation of GGU software and the CodeMeter software please refer to the information in the **Installation notes for GGU Software International**, which are supplied with the program.

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## 3 Language selection

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**GGU-TIMESET** is a bilingual program. The program always starts with the language setting applicable when it was last ended.

The language preferences can be changed at any time in the "?" menu, using the menu item "**Spracheinstellung**" (for German) or "**Language preferences**" (for English).

---

## 4 Starting the program

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After starting the program, you will see two menus at the top of the window:

- File
- ?

By going to the "**File**" menu, a previously saved file can be loaded by means of the "**Load**" menu item, or a new one created using "**New**". After clicking "**File/New**" an empty form is displayed on the screen. The menu bar will then show five menus:

- File
- Edit
- Graphics preferences
- Output preferences
- ?

After clicking one of these menus, the so-called menu items roll down, allowing you access to all program functions.

The program works on the principle of ***What you see is what you get***. This means that the screen presentation represents, overall, what you will see on your printer. In the last consequence, this would mean that the screen presentation would have to be refreshed after every alteration you make. For reasons of efficiency and as this can take several seconds for complex screen contents, the **GGU-TIMESET** screen is not refreshed after every alteration.

If you would like to refresh the screen contents, press either **[F2]** or **[Esc]**. The **[Esc]** key additionally sets the screen presentation back to your current zoom, which has the default value 1.5, corresponding to an A4 sheet in landscape format.

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## 5 Description of menu items

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### 5.1 *File menu*

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#### 5.1.1 "New" menu item

All data entered will be deleted after a confirmation prompt. You can then define new tests.

#### 5.1.2 "Load" menu item

You can load a file with test data, which was created and saved at a previous sitting, and then edit the test data.

#### 5.1.3 "Append" menu item

Using this menu item it is possible to load the results of a number of time-settlement tests, stored on disk as separate files, in order to visualise them together on one sheet. The tests contained in the added file will be appended to the current record.

Please note that the information concerning the page format, general entries (e.g. company name, project description, report no.) and preferences (e.g. time-settlement graphs pens) are not imported with the appended file.

Any annotations or preferences should therefore be defined after appending.

#### 5.1.4 "Save" menu item

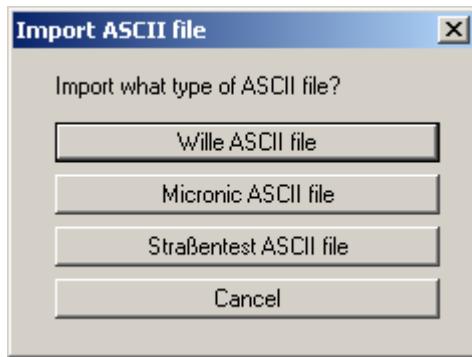
You can save data entered or edited during program use to a file, in order to have them available at a later date, or to archive them. The data is saved without prompting with the name of the current file. Loading again later creates exactly the same presentation as was present at the time of saving.

#### 5.1.5 "Save as" menu item

You can save data entered during program use to an existing file or to a new file, i.e. using a new file name. For reasons of clarity, it makes sense to use ".zst" as file suffix, as this is the suffix used in the file requester box for the menu item "File / Load". If you choose not to enter an extension when saving, ".zst" will be used automatically.

### 5.1.6 "Import ASCII file" menu item

Using this menu item it is possible to import ASCII files. You can import files from three companies: "Wille", "Micronic" and "Straßentest".



Once you have selected the company the corresponding data can be automatically imported. If you need to read data in a format provided by a different company, please contact **CIVILSERVE** (info@civilserve.com).

### 5.1.7 "Export to ASCII" menu item

The test data can be exported to an ASCII file, allowing processing in other applications.

### 5.1.8 "Printer preferences" menu item

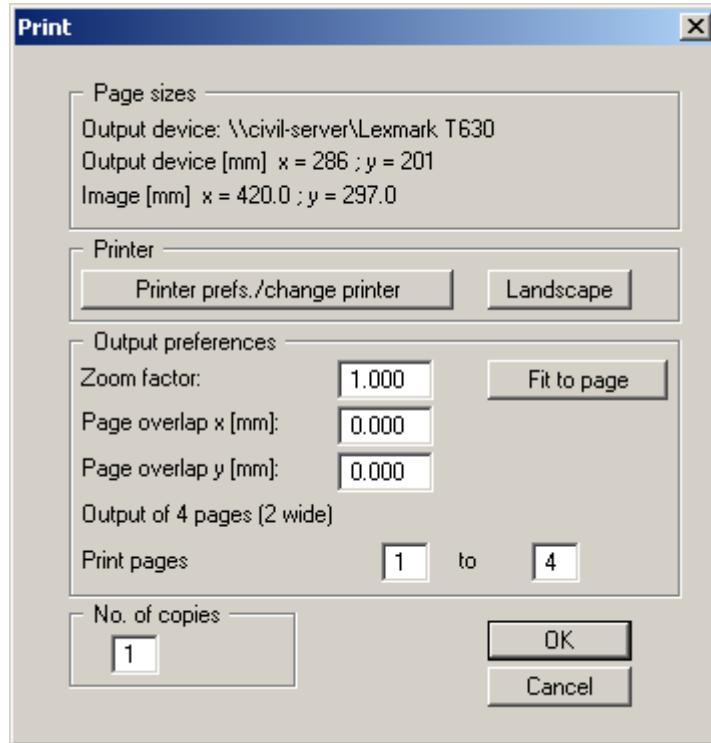
You can edit printer preferences (e.g. swap between portrait and landscape) or change the printer in accordance with WINDOWS conventions.

### 5.1.9 "Print and export" menu item

You can select your output format in a dialogue box. You have the following possibilities:

- **"Printer"**

allows graphic output of the current screen to the WINDOWS standard printer or to any other printer selected using the menu item **"File/Printer preferences"**. But you may also select a different printer in the following dialogue box by pressing the **"Printer prefs./change printer"** button.



In the upper group box, the maximum dimensions which the printer can accept are given. Below this, the dimensions of the image to be printed are given. If the image is larger than the output format of the printer, the image will be printed to several pages (in the above example, 4). In order to facilitate better re-connection of the images, the possibility of entering an overlap for each page, in x and y direction, is given. Alternatively, you also have the possibility of selecting a smaller zoom factor, ensuring output to one page ("Fit to page" button). Following this, you can enlarge to the original format on a copying machine, to ensure true scaling. Furthermore, you may enter the number of copies to be printed..

- **"DXF file"**

allows output of the graphics to a DXF file. DXF is a common file format for transferring graphics between a variety of applications.

- **"GGUCAD file"**

allows output of the graphics to a file, in order to enable further processing with the GGUCAD program. Compared to output as a DXF file this has the advantage that no loss of colour quality occurs during export.

- **"Clipboard"**

The graphics are copied to the WINDOWS clipboard. From there, they can be imported into other WINDOWS programs for further processing, e.g. into a word processor. In order to import into any other WINDOWS program you must generally use the "*Edit/Paste*" function of the respective application.

- **"Metafile"**

allows output of the graphics to a file in order to be further processed with third party software. Output is in the standardised EMF format (Enhanced Metafile format). Use of the Metafile format guarantees the best possible quality when transferring graphics.

If you select the "Copy/print area" tool  from the toolbar, you can copy parts of the graphics to the clipboard or save them to an EMF file. Alternatively you can send the marked area directly to your printer.

Using the "**Mini-CAD**" program module you can also import EMF files generated using other GGU applications into your graphics.

- **"MiniCAD"**

allows export of the graphics to a file in order to enable importing to different GGU applications with the Mini-CAD module.

- **"GGUMiniCAD"**

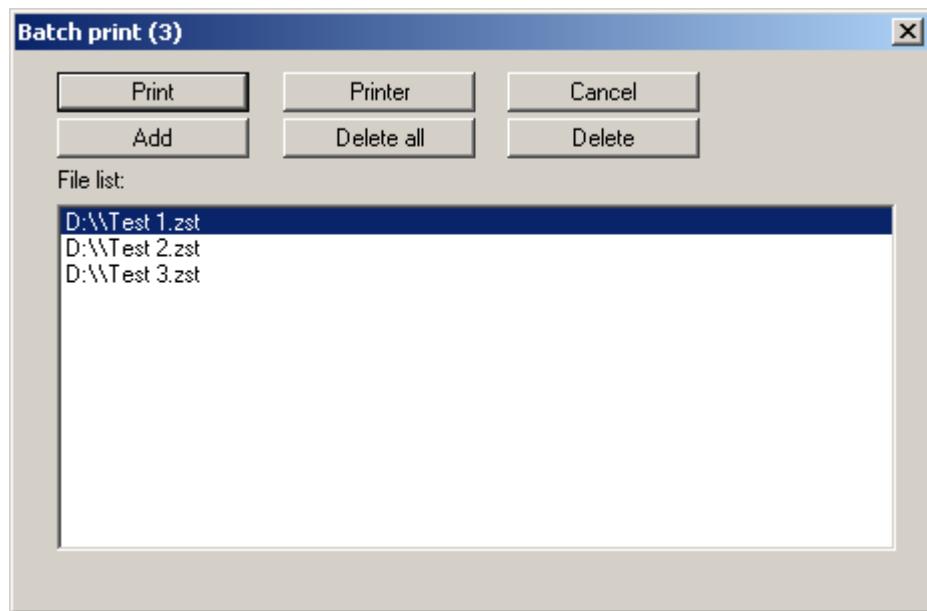
allows export of the graphics to a file in order to enable processing in the GGUMiniCAD program.

- **"Cancel"**

Printing is cancelled.

### 5.1.10 "Batch print" menu item

If you would like to print several appendices at once, select this menu item. You will see the following dialogue box:



Create a list of files for printing using "Add" and selecting the desired files. The number of files is displayed in the dialogue box header. Using "Delete" you can mark and delete selected individual files from the list. After selecting the "Delete all" button, you can compile a new list. Selection of the desired printer and printer preferences is achieved by pressing the "Printer" button.

You then start printing by using the "Print" button. In the dialogue box which then appears you can select further preferences for printer output such as, e.g., the number of copies. These preferences will be applied to all files in the list.

### 5.1.11 "Exit" menu item

After a confirmation prompt, you can quit the program.

### 5.1.12 "1, 2, 3, 4" menu items

The "1, 2, 3, 4" menu items show the last four files worked on. By selecting one of these menu items the listed file will be loaded. If you have saved files in any other folder than the program folder, you can save yourself the occasionally onerous *rummaging* through various sub-folders.

## 5.2 Edit menu

### 5.2.1 "Tests" menu item

This point represents the program's central menu item. As an example, after clicking this menu item the following dialogue box opens:



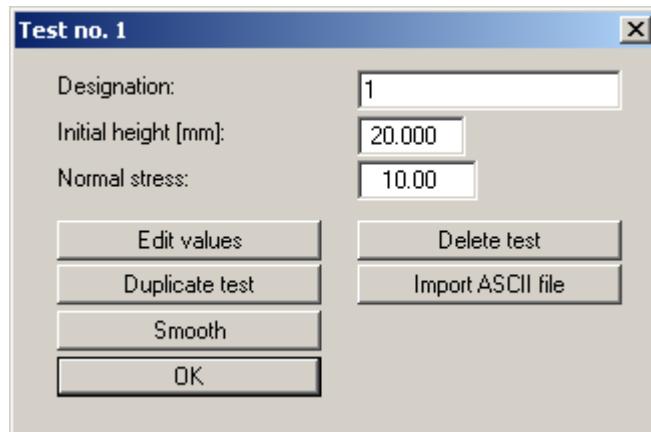
Three tests are already present in this example. The tests are automatically numbered and the test numbers ("1, 2, 3, ...") shown on the respective buttons. The following actions are possible:

- **"To menu bar"**  
You return to the original menu bar.
- **"New"**  
You can now enter data for a new test.
- **"1", "2", ...**  
By clicking the buttons labelled with the test numbers you can open and edit the data for the corresponding test.

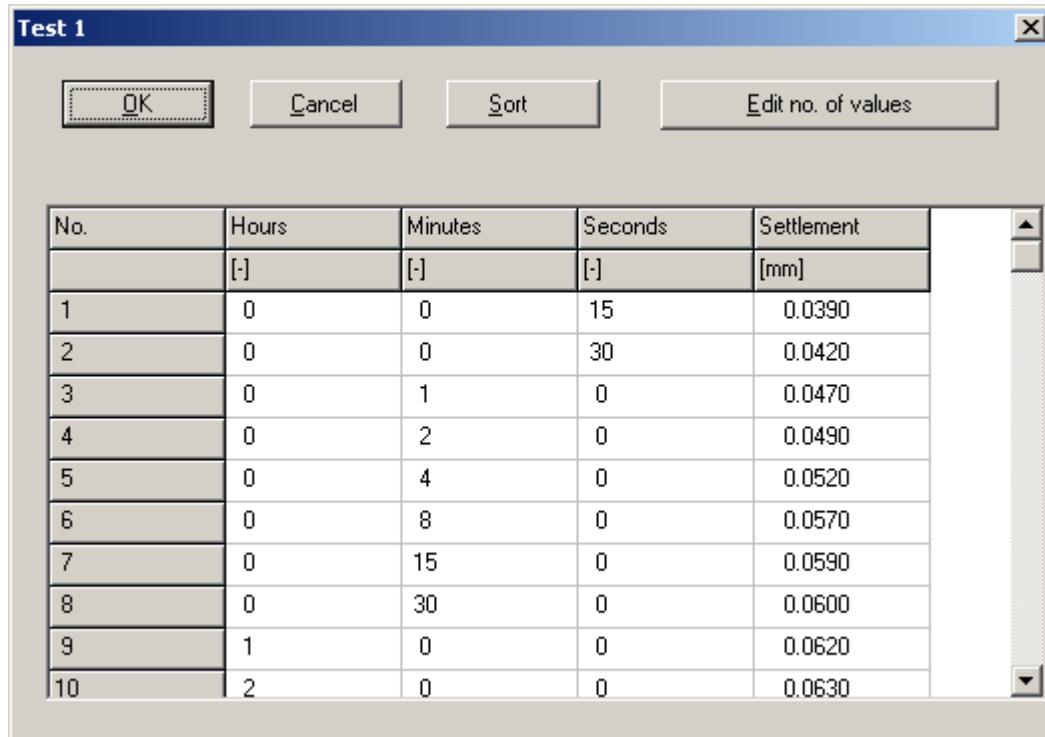
Presentation of the time-settlement graphs and the corresponding columns or rows in the diagram table always follows the sequence of the test numbers.

The presentation sequence can be altered by going to **"Edit/Swap"** (see Section 5.2.2). The selected tests are then assigned the specified new test numbers.

After clicking on **"New"** or on the button of an existing test a dialogue box opens for entering the test data. A maximum of 16 single tests can be entered. You can access the editor quickly by double-clicking in the table region containing the required time-settlement test. The following dialogue box opens:



Enter the designation, initial height (mm) and normal stress of the single test in this box. The measured data is entered after clicking the "Edit values" button:



The dialog box is titled "Test 1" and contains four buttons: "OK", "Cancel", "Sort", and "Edit no. of values". Below these buttons is a table with 12 rows of data. The table has five columns: "No.", "Hours", "Minutes", "Seconds", and "Settlement [mm]". The data is as follows:

No.	Hours	Minutes	Seconds	Settlement [mm]
	[h]	[m]	[s]	
1	0	0	15	0.0390
2	0	0	30	0.0420
3	0	1	0	0.0470
4	0	2	0	0.0490
5	0	4	0	0.0520
6	0	8	0	0.0570
7	0	15	0	0.0590
8	0	30	0	0.0600
9	1	0	0	0.0620
10	2	0	0	0.0630

In the example used here 12 data pairs have already been entered. The number of measured values can be edited by clicking the "Edit no. of values" button. The values are sorted according to time by pressing the "Sort" button. If irrelevant intermediate data needs to be deleted, change the time to a very large value so that the record is moved to the end. Subsequent reduction of the number of values then deletes this record from the list.

The following additional actions are possible in the editor box of the selected single test:

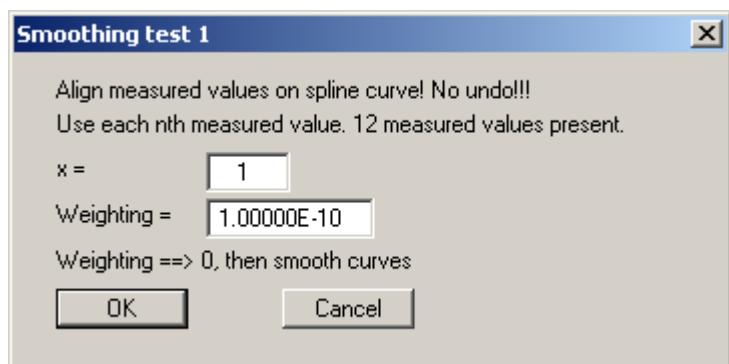
- **"Delete test"**  
After a confirmation prompt the single test is deleted.
- **"Duplicate test"**  
The test can be duplicated. All input is copied and the dialogue box of the newly generated test is opened automatically.

- **"Import ASCII file"**

The measured data can be imported from a file in standard ASCII format. After importing an appropriate file the current line of the ASCII file is displayed at the top. The time can be given in seconds or as a time, for example in the format '14.16.54'. The file can be navigated using the arrow buttons on the right. Enter the column number in which the respective data is located in the **"Time column"** and the **"Settlement column"**. If all the information is correct, the result for the row is shown in the box below the column. Otherwise, **"Error"** appears. If necessary, change the column delimiter. If the file contains invalid as well as valid rows, these will simply be skipped during the subsequent import. If the measured data are not in the correct units, a correction factor can be entered under **"Settlement factor"**. Finally, select the **"Import data"** button. The test can then be further processed or evaluated.

- **"Smooth"**

*Perturbed* measured data series' can be smoothed using this program routine. Save the record before employing this function as the smoothing operation cannot be undone. The following dialogue box opens:



- **"OK"**

You will arrive back at the previous dialogue box. All values entered will be accepted.

### 5.2.2 "Swap" menu item

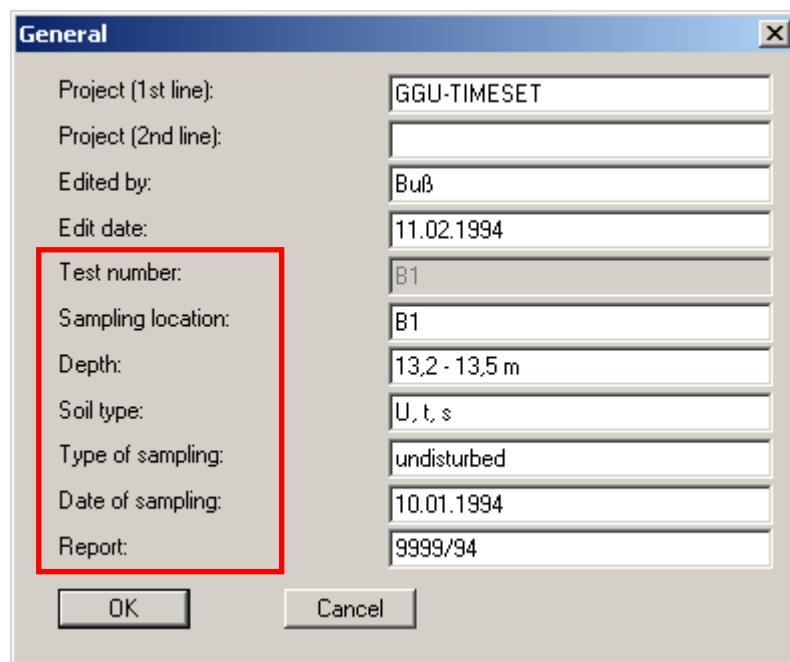
Important time-settlement test data (e.g. initial height, normal stress) are displayed in the table below the diagram. For several time-settlement tests, the presentation sequence corresponds to the input sequence, from left to right. If you would like to change this sequence you can do so after selecting this menu item.

### 5.2.3 "Delete all" menu item

After a security request, all tests will be deleted. After this, you can enter a new test using the "Edit/Tests" menu item (see Section 5.2.1).

### 5.2.4 "General" menu item

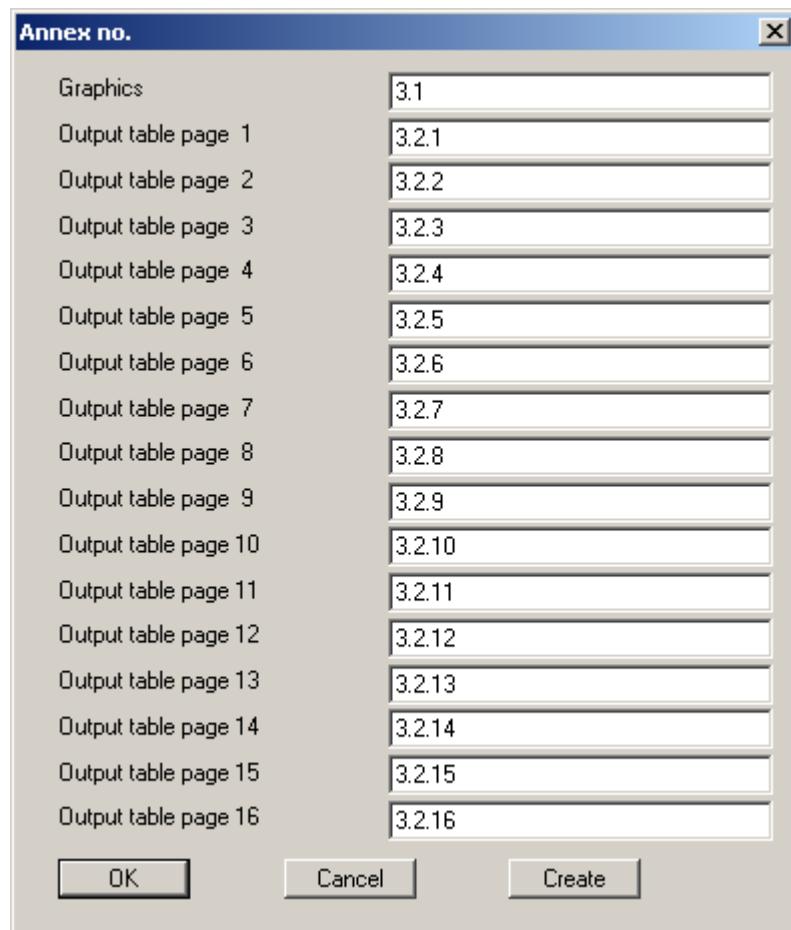
Go to this menu item to enter general data such as the project identification, report number, etc. This data is displayed in the correct elements of the output sheet.



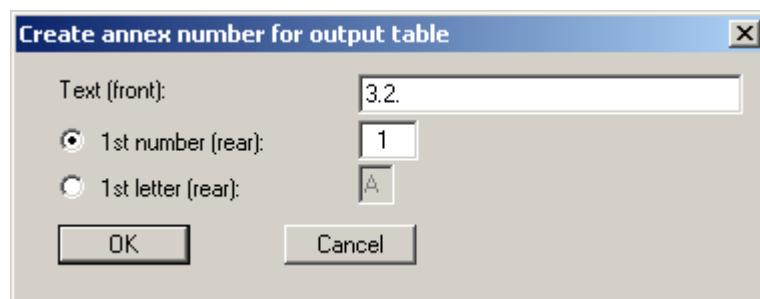
The marked texts in the dialogue box also appear in the output sheet. Input boxes can be altered or switched off such as "Test number:" as shown in the above dialogue box by going to the menu item "Output preferences/Texts + table" and pressing the "Output sheet texts" button (see Section 5.4.2).

### 5.2.5 "Annex numbers" menu item

Here it is possible to define the numbering of the time-settlement graph annexes and output table sheets. The numbers can be either user-defined or determined automatically by the program. The following dialogue box, with 16 input lines for output sheets, opens regardless of the actual number of tests entered. This is the maximum possible number of single tests.



The numbers for the output sheets can be easily generated by the program using the "Generate" button. Make the following entries to get the numbering shown above:



Enter the text to appear in front of the automatic numbering in the first input box; this can be a different number to the annex number for the graphics. It is then possible to select between numbering with numerals or a letter sequence. Activate the required command button and enter the first number or letter (in lower or upper case).

### 5.2.6 "Company" menu item

You can enter your company address in four lines. These lines will be entered at the top left of the form.

### 5.2.7 "Remarks" menu item

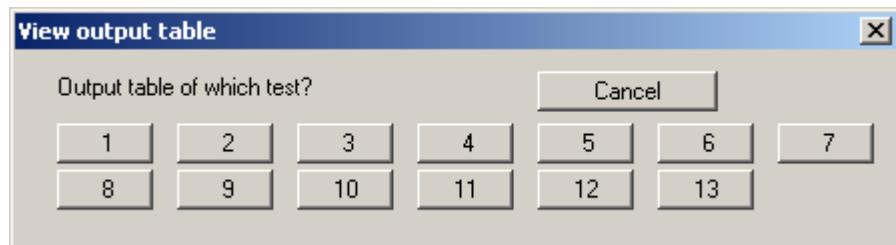
Using this menu item it is possible to enter remarks to the tests in four lines of text, which are displayed at the lower right of the form.

## 5.3 *Graphics preferences menu*

---

### 5.3.1 "View output table"/"View diagram" menu items

The default screen visualisation is the time-settlement tests graphics. If you go to the "View output table" menu item, the following dialogue box opens:

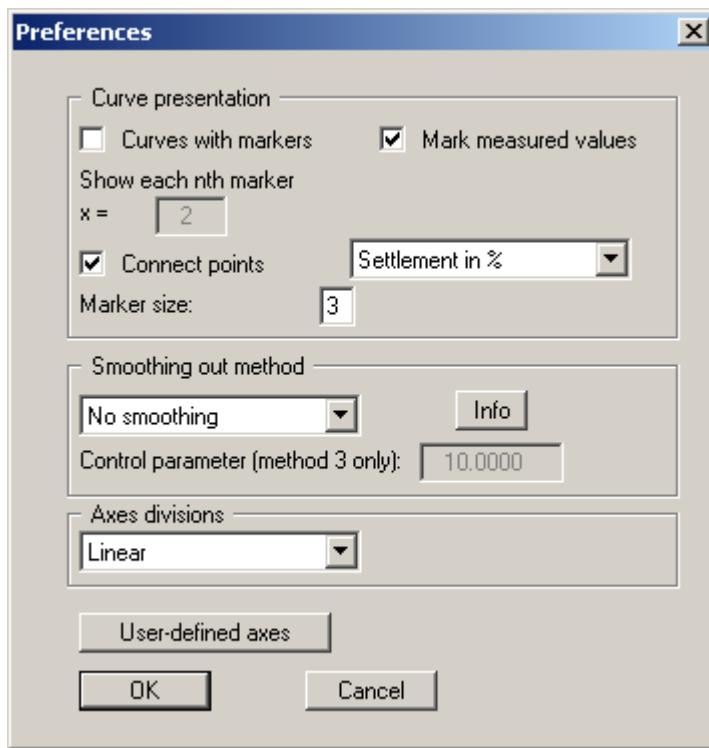


The "1", "2" etc. buttons represent the tests entered. The most important test data can be viewed for every test. If more than 35 measurements are available for the selected test the number must be reduced for the output sheet.

If you are viewing the output table you can navigate between the output tables for the individual tests using the arrow tools in the Smarticon bar. In order to return to the graphical visualisation of the time-settlement tests, click on the now active menu item "View diagram" or simply on the tool in the Smarticon bar. You can move between the output table and the graphical visualisation using this tool.

### 5.3.2 "Preferences" menu item

After selecting this menu item a dialogue box appears, in which you can edit preferences for graphical presentation.



- **"Graph presentation"** group box:

By activating the appropriate check boxes the measured data can be visualised as a time-settlement graph, provided with markers at given intervals or directly attached to the measured data. The marker size is user-defined. If "Graphs with markers" is activated the spacing can be altered by changing the value of "x =".

Each time-settlement graph uses a different marker, thus ensuring simple differentiation between several time-settlement graphs, even on monochrome printouts. This also allows easier allocation of several time-settlement graphs to the data in the diagram table. Simply include the time-settlement graph signature in the diagram table (see menu item "**Output preferences/Texts + Table**", "**Edit texts and allocations**" button in the 5.4.2 section).

- **"Smoothing out method"** group box

You can select from four smoothing out methods: A message box provides information on the type of smoothing:

No smoothing	= no smoothing
Method 1	= strict Bezier spline
Method 2	= "loose" Bezier spline
Method 3	= rational spline interpolation

Very rounded graphs are generated using smoothing out methods 2 and 3. Deviations between the measured data and the time-settlement graphs are visible when the measured test data is marked.

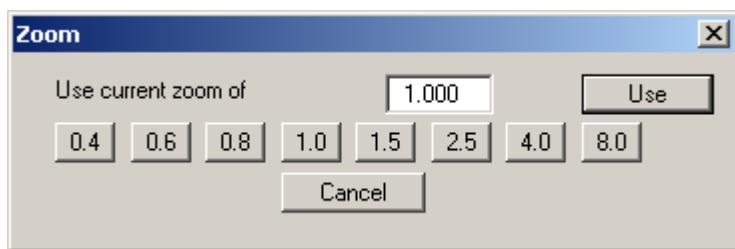
For method 3, smoothing can be influenced with the "**Control parameter**". The value of the control parameters may only be in the range between > -1.0 and < 1000.

- **"Axes divisions"** group box  
A linear, logarithmic or a root scale can be selected for visualisation of the graph's time axis.
- **"User-defined axes"** button  
The program automatically selects a sensible axes scale for the graphical visualisation of the time-settlement graphs. If the **"User-defined axes"** button is clicked a dialogue box opens in which the check box **"Use the following axes values"** must be activated. The required minimum and maximum values for time and settlement can then be entered.

### 5.3.3 "Refresh and zoom" menu item

The program works on the principle of ***What you see is what you get***. This means that the screen presentation represents, overall, what you will see on your printer. In the last consequence, this would mean that the screen presentation would have to be refreshed after every alteration you make. For reasons of efficiency and as this can take several seconds for complex screen contents, the screen is not refreshed after every alteration.

If, e.g., after using the zoom function (see below), only part of the image is visible, you can achieve a complete view using this menu item.



A zoom factor between 0.4 and 8.0 can be entered in the input box. By then clicking on **"Use"** to exit the box the current factor is accepted. By clicking on the **"0.4"**, **"0.6"**, etc. buttons, the selected factor is used directly and the dialogue box closed.

It is much simpler, however, to get a complete overview using **[Esc]**. Pressing **[Esc]** allows a complete screen presentation using the zoom factor specified in this menu item. The **[F2]** key allows screen refreshing without altering the coordinates and zoom factor.

### 5.3.4 "Zoom info" menu item

By clicking two diametrically opposed points you can enlarge a section of the screen in order to view details better. An information box provides information on activating the zoom function and on available options.

### 5.3.5 "Legend font selection" menu item

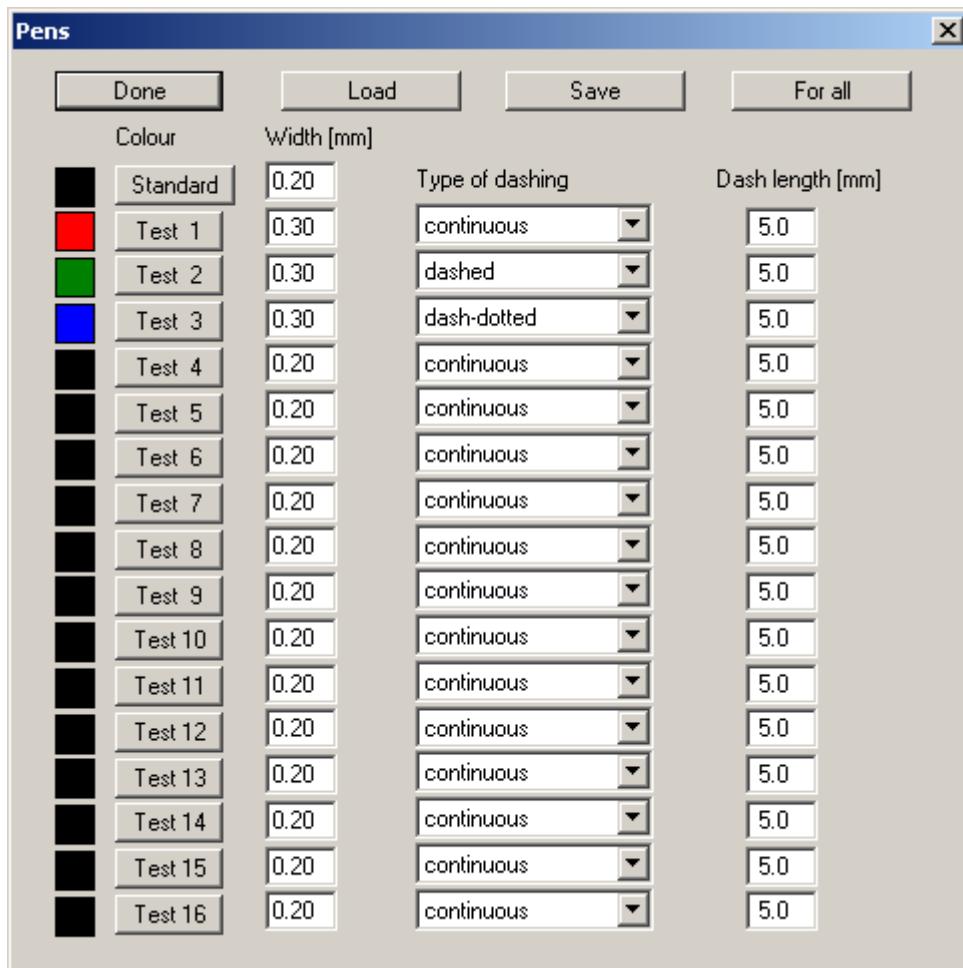
With this menu item you can switch to a different true-type font. All available true-type fonts are displayed in the dialogue box.

### 5.3.6 "Font size selection" menu item

You can edit font sizes of texts [in mm] within the various input areas.

### 5.3.7 "Pen colour and width" menu item

For reasons of clarity, different colours are used as default for graphic presentation of the time-settlement graphs, as well as the type of dashing. With this menu item you can alter the preferences to suit your wishes.



The pen width, line type and dashing can be edited for the time-settlement graphs and, after clicking the buttons with the test numbers, the pen colours be adapted. If the same line colour is to be used for all time-settlement graphs, press the "For all" button and specify the required colour. The pen preferences can be saved as an ".stf" file, or be loaded from such, using "Save" and "Load", in order to give a variety of pen combinations.

On **monochrome printers** (e.g. laser printers), colours are shown in a corresponding grey scale. Graphic elements employing very light colours may be difficult to see. In such cases it makes sense to edit the colour preferences.

### 5.3.8 "Mini-CAD toolbar" menu item

Using this menu item you can add free text to the graphics and add lines, circles, polygons and images (e.g. files in formats BMP, JPG, PSP, TIF, etc.). A pop-up menu opens; the icons and functions used are described in more detail in the "Mini-CAD" manual provided.

### 5.3.9 "Toolbar preferences" menu item

After starting the program a horizontal toolbar appears below the program menu bar. If you would rather work with a popup window with several columns, you can specify your preferences using this menu item. The smarticons can also be switched off.

At the bottom of the program window you find a status bar with further information. You can also activate or switch off the status bar here. The preferences will be saved in the "GGU-TIMESET.alg" file (see menu item "**Graphics preferences/Save graphics preferences**") and will be active at the next time the program is started.

By clicking on the tools (smarticons) you can directly reach most of the program functions. The meaning of the Smarticons appears as a text box if you hover with the mouse pointer over the tools. Some of the tool functions can be activated from the normal menu items.



"Zoom out"

If you have previously *zoomed in*, this tool returns to a full screen display.



"Zoom (-)"/"Zoom (+)"

With the zoom functions you can zoom in or out of parts of the image, by clicking the left mouse button.



"Undo move object"

If you have previously edited the position or size of an element on the output sheet ([**F11**] or used "**Output preferences/Move objects**"), you can undo the last changement with this tool.



"Restore move object"

If you have previously undone a changement, you can restore with this tool.



"Copy/print area"

Use this tool to copy only parts of the graphics in order to paste them, e.g. to a report. You will see information on this function and can then mark an area, which is copied to the clipboard or can be saved in a file. Alternatively you can send the marked area directly to your printer.

### 5.3.10 "Save graphics preferences" menu item

Some of the preferences you made with the menu items of the "**Graphics preferences**" menu as well as the inputs using the "**Edit/Company**" menu item can be saved to a file. If you select "**GGU-TIMESET.alg**" as file name, and save the file on the same level as the program, the data will be automatically loaded the next time the program is started and need not be entered again.

### 5.3.11 "Load graphics preferences" menu item

You can reload a graphics preferences file into the program, which was saved using the "**Graphics preferences/Save graphics preferences**" menu item. Only the corresponding data will be refreshed.

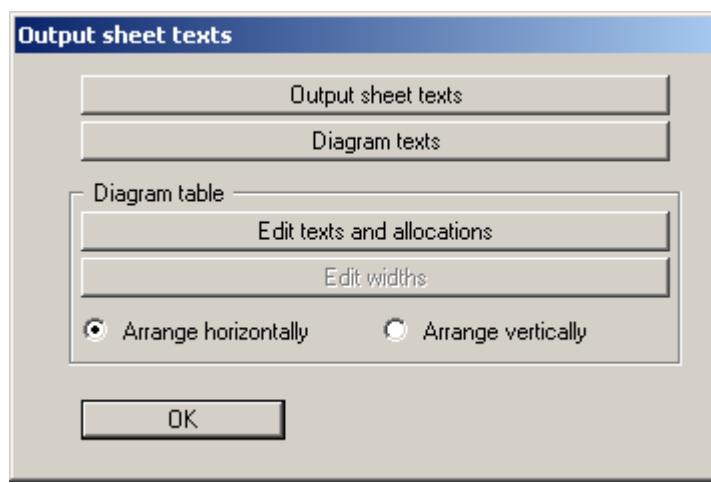
## 5.4 Output preferences menu

### 5.4.1 "Page size" menu item

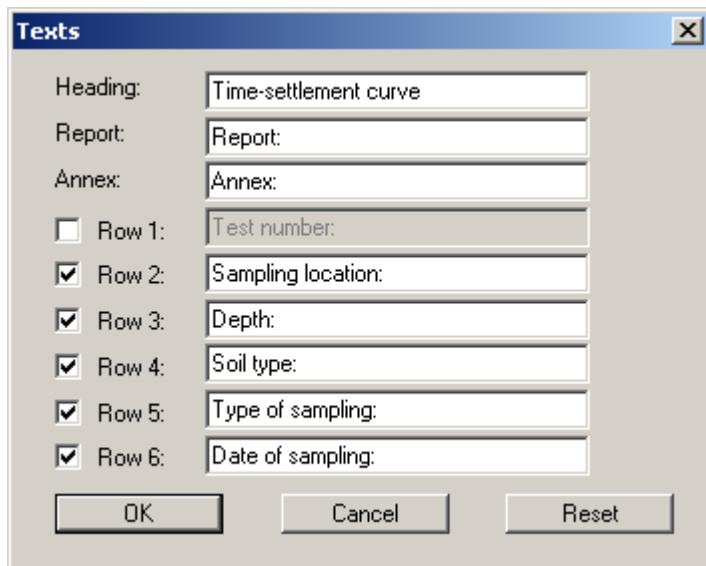
The default page set-up is A4 (landscape) when the program is started. You can edit the page format in the dialogue box.

### 5.4.2 "Texts + table" menu item

The default labelling of some output sheet elements can be edited in this menu item's dialogue box. Among other things, the name of the output sheet can be specified here. An option box opens in which the various fields can be selected for editing using the correspondingly labelled buttons.



After clicking the "Output sheet texts" button the following dialogue box opens:



Your input in lines 1 to 6 of the above dialogue box, as well as the input for "Report:" and "Annex:" also represent the designations for the input boxes in the "Edit/General" menu item dialogue box. If lines are deactivated in the above dialogue box, the corresponding input boxes in the "Edit/General" menu item dialogue box are also deactivated (see Section 5.2.4). Use "Reset" to restore the default labelling settings.

A dialogue box opens after pressing the "Diagram texts" button, allowing the x- and y-axes labelling for the time-settlement diagram to be edited. Here, too, the default labelling can be restored using the "Reset" button.

In the "Diagram table" group box in the above "Texts + table" dialogue box the required texts, text allocations and type of visualisation can be edited.

- **"Edit texts and allocation"**

A dialogue box opens for specifying the parameters and properties to be displayed in the diagram table. It is possible to display up to a maximum of 15 lines. The sequence corresponds to the numbering in the following dialogue box.

Diagram table + output table texts			
Line	Text	Enter what?	
1	Designation:	Designation	OK
2	Signature:	Signature	Cancel
3	Initial height [mm]	Initial height	Reset
4	Normal stress	Normal stress	Save
5	max. Settlement [mm]	Max. settlement [mm]	Load
6	Max. settlement [%]	Max. settlement [%]	
7	Test duration	Test duration	
8	Consolidation coefficient	Consolidation coefficient	
9	Soil type	Free text	
10	Nr. 10	none	
11	Nr. 11	none	
12	Nr. 12	none	
13	Nr. 13	none	
14	Nr. 14	none	
15	Nr. 15	none	

In the "Text" boxes a text must be entered by hand which is later used as a description. After clicking the arrows in the "Enter what?" column the values or text in the drop-down list entered or determined by the program can be allocated to the rows of the diagram table. Lines with a "None" allocation are not displayed.

If information needs to be added to the table that is not found in the default texts in the table, a "Free text" can be used. In the "Edit/Tests" menu item you will then see an additional "Further input" button and can enter text according to your requirements in the dialogue box.

Your texts and allocation can be saved in a "\*.ktx" file using the "Save" button and opened again using the "Load" button. The program default texts or allocations can be restored using the "Reset" button.

- **"Edit widths"**

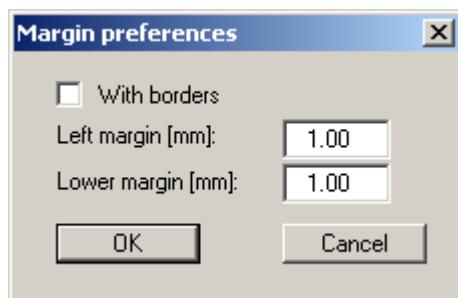
If the table is arranged vertically, a fixed width for each column can be defined using this button. Please note, however, that the total width of the table needs to fit into the layout of your output sheet. In order to achieve a uniform distribution within the specified total width, e.g. as defined using [F11], click the **"All the same width"** button.

- **"Arrange horizontally"/"Arrange vertically"**

This command button defines the alignment of the diagram table.

#### 5.4.3 "Margins" menu item

In the default program preferences the form is shown with cutting borders. For output to an A4 printer, a reduction of the printer output is generally necessary, as proprietary printers cannot fully cover an A4 page. The margin preferences can be defined in the following dialogue box.



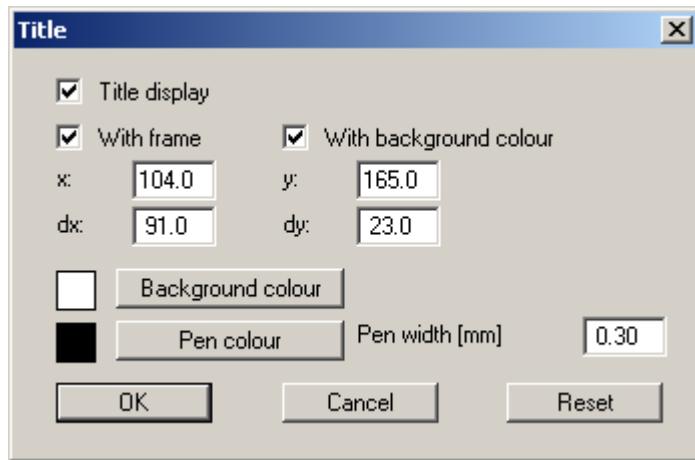
By deactivating the **"With borders"** check box and with an appropriate choice of left and lower margins, it is generally possible to create a non-reduced printer output. It is necessary to also adapt the page height and width (see Section 5.4.1).

#### 5.4.4 "Position info" menu item

The positions and layout of the individual elements on the output sheet can be altered using the following menu items. This menu item provides information on the options for altering the position and layout more quickly using the mouse.

#### 5.4.5 "Title (change position)" menu item

The position and layout of the title element can be altered via the dialogue box for this menu item, if the **"Title display"** check box is activated.



The position of the element on the output sheet and its size can be defined or edited by means of the variables "**x**" and "**y**", "**dx**" and "**dy**". The element can be provided with a frame and a background colour to suit your personal requirements. If the element needs to be returned to its original condition, this can be done using the **"Reset"** button. Alternatively, you can alter the size and shape of the element using the mouse (see menu item **"Output preferences/Move objects"**, Section 5.4.16).

The heading **"Time-settlement graph"** shown in the title element can be edited in the menu item **"Output preferences/Texts + table"**, **"Output sheets texts"** button (see Section 5.4.2). The texts **"Project (1<sup>st</sup> line)"** and **"Project (2<sup>nd</sup> line)"** are entered immediately after double-clicking the element or using the menu item **"Edit/General"** (see Section 5.2.4).

#### 5.4.6 "Time-settlement graphs" menu item

Almost exactly the same dialogue box opens with the same preference options as that described in the **"Output preferences/Title (change position)"** menu item (see Section 5.4.5). Because the time-settlement graphs are the central graphical element, it cannot be switched off. Proceed as described above to alter the position or layout of the **"Time-settlement graphs"** element.

#### 5.4.7 "Company" menu item

Almost exactly the same dialogue box opens with the same preference options as that described in the **"Output preferences/Title (change position)"** menu item (see Section 5.4.5). Simply proceed as described there to edit the **"Company"** element.

The input for this element can be edited immediately after double-clicking on the element or via the menu item **"Edit/Company"** (see Section 5.2.6).

#### **5.4.8 "Test no. etc." menu item**

Almost exactly the same dialogue box opens with the same preference options as that described in the "**Output preferences/Title (change position)**" menu item (see Section 5.4.5). To edit the "**Test no. etc.**", element, simply proceed as described there.

The input for this element can be edited immediately after double-clicking on the element or via the menu item "**Edit/General**" (see Section 5.2.4). For this element you also have the option of adapting the texts in front of the input boxes to suit your needs. Go to the menu item "**Output preferences/Texts + table**", "**Output sheets texts**" button (see Section 5.4.2).

#### **5.4.9 "Annex and report" menu item**

Almost exactly the same dialogue box opens with the same preference options as that described in the "**Output preferences/Title (change position)**" menu item (see Section 5.4.5). To edit the "**Annex and report**" element, simply proceed as described there.

The input for this element can be edited directly by double-clicking the element or by going to the menu item "**Edit/General**" (see Section 5.2.4). For this element you also have the option of adapting the texts in front of the input boxes to suit your needs. Go to the menu item "**Output preferences/Texts + table**", "**Output sheets texts**" button (see Section 5.4.2). In addition, the report and annex numbers can be rotated by 90° in the diagram view, if the "**Annex and report**" element is opened directly by double-clicking.

#### **5.4.10 "Remarks" menu item**

Almost exactly the same dialogue box opens with the same preference options as that described in the "**Output preferences/Title (change position)**" menu item (see Section 5.4.5). To edit the "**Remarks**" element, simply proceed as described there.

The input for this element can be edited immediately after double-clicking on the element or via the menu item "**Edit/Remarks**" (see Section 5.2.7).

#### **5.4.11 "Edited by + date" menu item**

Almost exactly the same dialogue box opens with the same preference options as that described in the "**Output preferences/Title (change position)**" menu item (see Section 5.4.5). To edit the "**Edited by + date**" element, simply proceed as described there.

The input for this element can be edited immediately after double-clicking on the element or via the menu item "**Edit/General**" (see Section 5.2.4).

#### **5.4.12 "Diagram table" menu item**

Almost exactly the same dialogue box opens with the same preference options as that described in the "**Output preferences/Title (change position)**" menu item (see Section 5.4.5). To edit the "**Diagram table**" element, simply proceed as described there.

#### 5.4.13 "Output table (test data)" menu item

Almost exactly the same dialogue box opens with the same preference options as that described in the "Output preferences/Title (change position)" menu item (see Section 5.4.5). To edit the "Output table (test data)" element, simply proceed as described there.

#### 5.4.14 "Output table (results)" menu item

Almost exactly the same dialogue box opens with the same preference options as that described in the "Output preferences/Title (change position)" menu item (see Section 5.4.5). To edit the "Output table (results)" element, simply proceed as described there.

#### 5.4.15 "Reset all" menu item

With this button, all preferences for the aforementioned elements, which may have been edited with the previous menu item, will be reset to the program defaults.

#### 5.4.16 "Move objects" menu item

When you go to this item you can move the various objects with the aid of the mouse. Move the mouse over the object to be moved. When you are located above a moveable object the mouse pointer appears in the shape of a cross. You can now press and hold the left mouse button and drag the object to the required position.

After going to this menu item only one object at a time can be moved using the mouse or its size be altered.

In order to move or edit several objects, this function can be more quickly activated by pressing [F11] or the  icon.

The size of an object can also be altered using this menu item or the [F11] key. If you move over the frame of a changeable object after activating this function the mouse assumed the shape of a double-headed arrow. Hold the left mouse button and move the frame until the object has reached the required size. To retain the ratio of the sides, pull at one corner only. If on one side only is pulled the object will become higher or wider.

The last change made in the position or size of an object can be undone using [Back] or by clicking the  icon.

## 5.5 ? menu

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### 5.5.1 "Copyright" menu item

You will see a copyright message and information on the program version number.

The "System" button shows information on your computer configuration and the folders used by **GGU-TIMESET**.

### 5.5.2 "Maxima" menu item

Information on the maximum number of tests possible is displayed in a message box.

### 5.5.3 "Help" menu item

The **GGU-TIMESET** online-help is opened using an installed browser (e.g. MS Internet Explorer). The help function can also be accessed using the **[F1]** function key.

### 5.5.4 "GGU on the web" menu item

Using this menu item you can access the GGU Software website: [www.ggu-software.com](http://www.ggu-software.com). Keep in touch with new program versions and the regular **download** offers.

If you would like to be automatically notified about program innovations, please register for the Newsletter in our Knowledge Base. Go to the following website: <http://kbase.civilserve.com>.

### 5.5.5 "GGU-Support" menu item

This menu item takes to the GGU-Software [Support area](#) at [www.ggu-software.com](http://www.ggu-software.com).

### 5.5.6 "What's new?" menu item

You will see information on program improvements in comparison to older versions.

### 5.5.7 "Language preferences" menu item

This menu item allows you to switch the menus and the graphics from German to English and vice versa. To work in German, deactivate the two switches "**Dialoge + Menüs übersetzen (translate dialogues, menus)**" und "**Graphiktexte übersetzen (translate graphics)**".

Alternatively, you can work bilingually, e.g. with German dialogue boxes but with graphic output in English. The program always starts with the language setting applicable when it was last ended.

## 6 Tips

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You can scroll the screen with the keyboard using the cursor keys and the **[Page up]** and **[Page down]** keys. By clicking and pulling with the mouse, with **[Ctrl]** pressed, you activate the zoom function, i.e. the selected section will fill the screen. Furthermore you can use the mouse wheel to zoom in/out or scrolling the screen presentation. The following mouse wheel functions are available:

- Mouse wheel up = move screen image up
- Mouse wheel down = move screen image down
- **[Ctrl]** + mouse wheel up = enlarge screen image (zoom in)
- **[Ctrl]** + mouse wheel down = shrink screen image (zoom out)
- **[Shift]** + mouse wheel up = move screen image right
- **[Shift]** + mouse wheel down = move screen image left

If you click the right mouse button anywhere on the screen a context menu containing the principal menu items opens.



By double-clicking the left mouse button on output sheet elements or Mini-CAD objects, the editor for the selected object immediately opens, allowing it to be edited. By double-clicking output sheet elements while holding the **[Shift]** key, the preferences for the position, size and appearance of the element open for editing in the editor.

Some of the function keys are assigned program functions. The allocations are noted after the corresponding menu items. The individual function key allocations are:

- **[Esc]** refreshes the screen contents and sets the screen back to the given format (A4 landscape). This is useful if, for example, you have used the zoom function to display parts of the screen and would like to quickly return to a complete overview.
- **[F1]** opens the Help file.
- **[F2]** refreshes the screen without altering the current magnification.
- **[F11]** activates the menu item "**Output preferences/Move objects**".

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